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## NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 08/27/2008

Johnson & Johnson International Patent Law Division Attention Philip Johnson P.O. Box 1222 New Brunswick, NJ 08903

EXAMINER				
YANG, NELSON C				
ART UNIT	PAPER NUMBER			

1641 DATE MAILED: 08/27/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/832.663	04/11/2001	Anthony J. Polak	LFS5044USNP	1850

TITLE OF INVENTION: SENSOR DEVICE AND METHODS FOR MANUFACTURE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	11/28/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

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If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

## Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450

Alexandria, Virginia 22313-1450 (571)-273-2885 or <u>Fax</u>

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for

maintenance fee notifications. Note: A certificate of mailing can only be used for domestic mailings of the CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 7590 08/27/2008 Certificate of Mailing or Transmission Johnson & Johnson I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. International Patent Law Division Attention Philip Johnson P.O. Box 1222 (Depositor's name New Brunswick, NJ 08903 (Signature (Date APPLICATION NO. FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. FILING DATE 09/832,663 04/11/2001 Anthony J. Polak LFS5044USNP 1850 TITLE OF INVENTION: SENSOR DEVICE AND METHODS FOR MANUFACTURE APPLN. TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1440 \$300 \$0 \$1740 11/28/2008 **EXAMINER** ART UNIT CLASS-SUBCLASS YANG, NELSON C 1641 435-007920 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. or agents OR, alternatively, (2) the name of a single firm (having as a member a ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) 4a. The following fee(s) are submitted: lssue Fee A check is enclosed. Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_\_ (enclose an extra copy of this fo Advance Order - # of Copies \_ (enclose an extra copy of this form). 5. Change in Entity Status (from status indicated above) a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ■ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2). NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. Authorized Signature Date Typed or printed name Registration No. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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09/832,663 04/11/2001		Anthony J. Polak	LFS5044USNP 1850	
7590 08/27/2008			EXAMINER	
Johnson & Johnson			YANG, NELSON C	
International Patent Law Division			ART UNIT	PAPER NUMBER
Attention Philip Jo	hnson		1641	
P.O. Box 1222			DATE MAILED: 08/27/2008	
New Brunswick, N	IJ 08903		D711E 1.11 HEED. 00/2/1200	

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 524 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 524 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No.	Applicant(s)	
09/832.663	POLAK ET AL.	
Examiner	Art Unit	
Nelson Yang	1641	
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46 and 47, renumber 1-39 respe	<u>ectively</u> .	
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itted. Note the attached EXAMINes reason(s) why the oath or dec		E OF
on's Patent Drawing Review ( P	TO-948) attached	
.84(c)) should be written on the di	rawings in the front (not the back	) of
		he
6. ☐ Interview Summ Paper No./Mail 7. ☑ Examiner's Ame	nary (PTO-413), Date endment/Comment	ce
	D9/832,663  Examiner  Nelson Yang  Pars on the cover sheet with the (OR REMAINS) CLOSED in this or other appropriate communication is subjected and MPEP 1308.  Parch 17, 2008.  A6 and 47, renumber 1-39 respected and 35 U.S.C. § 119(a)-(d) or (f) are been received.  The been received in Application Not cuments have been received in the feature of this application.  The best reason(s) why the oath or decist be submitted.  The shade of the attached EXAMIN are reason(s) why the oath or decist be submitted.  The header according to 37 CFR 1.  The header according to 37 CFR 1.	O9/832,663  Examiner  Nelson Yang  1641  POLAK ET AL.  Art Unit  1641  Polars on the cover sheet with the correspondence address (OR REMAINS) CLOSED in this application. If not included or other appropriate communication will be mailed in due cours (GHTS. This application is subject to withdrawal from issue at the standard or other appropriate communication will be mailed in due cours (GHTS. This application is subject to withdrawal from issue at the standard or other appropriate communication will be mailed in due cours (GHTS. This application is subject to withdrawal from issue at the standard or other appropriate cours (GHTS. This application is subject to withdrawal from issue at the standard or other appropriate cours (GHTS. This application is subject to withdrawal from issue at the standard or other appropriate course (GHTS. This application is subject to withdrawal from issue at the standard or of the standard or of the standard or of the subject to withdrawal from issue at the subject to withdrawal from issue at the standard or of the standard or of this application for the subject to withdrawal from issue at the subject to withdrawal f



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### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mayumi Maeda on August 6, 2008, and August 11, 2008.

Please cancel claims 16 and 17 and amend claims 1, 5, 11, 12, and 44 as follows:

- 1. A device for detecting the presence of an analyte in a sample, comprising:
  - (a) a core comprising:
    - (i) a binding substrate <u>comprising a binding site within a porous material</u>, <u>wherein the binding site comprises a molecular imprint of the analyte</u>. <del>with a binding site for the analyte</del>.
    - (ii) at least one analogue that binds in the binding site and that has a label with a first emission wavelength;
    - (iii) a quenching dye <u>located within the porous material of the binding substrate</u>; and
    - (iv) a void volume that is at least partially defined by the binding substrate;
  - (b) a reference with a different emission wavelength than the label; and
  - (c) an analyte-permeable membrane that completely encapsulates components (a) and (b) and that is transparent to light of the wavelengths that excite the label and the reference, wherein the device is seamless and the binding substrate has a molecular imprint of the analyte. and
  - wherein the analogue is capable of flowing in and out of the porous material into the void volume, while the quenching dye is not capable of leaving the porous material.
- 5. The device of claim 1, wherein said reference is covalently bonded to at least one of the interior or exterior of the analyte-permeable membrane
- 11. The device of claim 1, wherein said binding substrate <u>further comprises a material</u> is selected from the group consisting of dextrans, glycogens, yeast mannans, amylopectins, levans, globulin, proteins, hormones, antibodies, thyroxin binding globulin, actin, and tubulin.
- 12. The device of claim 1, wherein the binding substrate comprises is crosslinked dextran.

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44. A method of detecting the presence of one or more analytes in a sample in vivo, comprising:

(i) I. implanting in the skin of a living organism, in fluid contact with a biological fluid, a device

comprising at least one device for detecting the presence of an analyte in a sample, the device

comprising:

- (a) a core comprising
  - (i) a binding substrate <u>comprising a binding site within a porous material</u>, wherein the binding site comprises a molecular imprint of the analyte. with a binding site for the analyte.
  - (ii) at least one analogue that binds in the binding site and that has a label with a first emission wavelength;
  - (iii) a quenching dye <u>located</u> within the porous material of the binding substrate; and
  - (iv) a void volume that is at least partially defined by the binding substrate;
- (b) a reference with a different emission wavelength than the label; and
- (c) an analyte-permeable membrane that completely encapsulates components (a) and (b) and that is transparent to light of the wavelengths that excite the label and the reference.

wherein the device is seamless and the binding substrate has a molecular imprint of the analyte. and

wherein the analogue is capable of flowing in and out of the porous material into the void volume, while the quenching dye is not capable of leaving the porous material;

(ii) II. irradiating the device with light; and

(iii) III. detecting light emitted from the device.

wherein the device is implanted in the skin of the living organism.

## Reasons for Allowance

The following is an examiner's statement of reasons for allowance: the prior art fail to teach a porous material with a labeled analogue and quenching dye, wherein the labeled

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analogue is capable of flowing in and out of the porous material into the void volume, while the quenching dye must remain within the porous material.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson Yang whose telephone number is (571)272-0826. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long V. Le can be reached on (571)272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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